



LEVELING KIT INSTALLATION INSTRUCTIONS

2013-2018 Toyota Rav4 except Adventure

IMPORTANT:

- Read the attached GENERAL INSTALLATION NOTES prior to beginning any work.
- Read these instructions fully prior to beginning work to verify all tools, equipment, skills and methods are on hand to safely complete the installation.

LEVELING KIT MATERIAL LIST

- Hex flange nut, 10 x 1.25 6
- Leveling shim 2

Installation of these components should be performed by experienced and qualified mechanics, using safe and correct tools and equipment. Northwoods recommends this installation be performed by a qualified automotive shop.

1. Support the vehicle safely on a lift or hoist, or certified jack stands.
2. Remove the wheels.
3. It is recommended that the negative battery cable be disconnected during all maintenance procedures.
4. Size references below are wrench sizes, unless otherwise noted.

FRONT STRUT REMOVAL

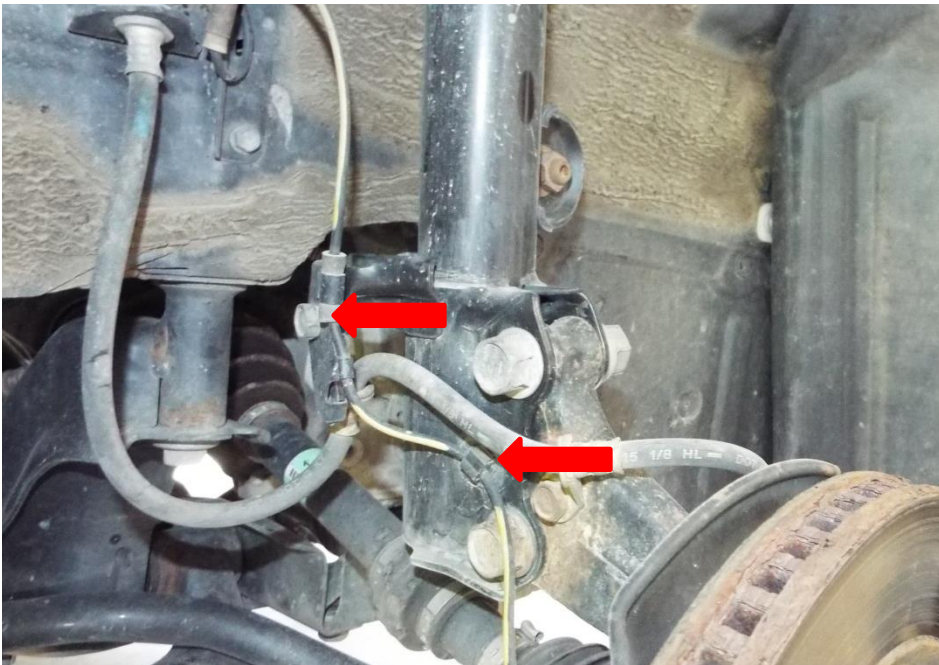
1. From inside the engine bay, remove two of the three strut top retaining nuts (14mm). Loosen the third.



2. Remove the upper sway bar link (6mm hex and 17mm box end wrench).



3. Remove the brake line retaining bolt (14mm), and move brake and ABS lines away from the strut body. Using a small screwdriver, open the plastic clip holding the ABS line to the strut body.



4. Remove the two lower strut nuts and bolts (22mm). Support the lower a-arm and spindle assembly from over extending the drive axle.



5. Remove the final strut top retainer nut and remove the strut assembly.
6. Clean and inspect the strut assembly. Replace worn or damaged parts.
7. Place the Northwoods Performance leveling plate on top of the strut on top of the existing washer plate.
8. Install the strut onto the vehicle in reverse order of removal.

STRUT INSTALLATION

1. Install the strut aligning the three top studs through the upper mounting frame, and hold in place with one or more upper strut retaining nuts. Use the provided Northwoods flange nuts.
2. Install the two lower strut mount bolts.
3. Complete the installation of the three upper strut retaining flange nuts.
4. Torque the upper strut retaining flange nuts to 37 ft-lbs, and the lower strut mounting bolts/nuts to 177 ft-lbs.
5. Install the brake and ABS lines with retaining bolt (14 ft-lbs), and anti-lock brake line in the plastic clip.
6. Install the upper sway bar with nut (55 ft-lbs). This may have to be done simultaneously with the other side for alignment due to the lift.
7. Visually inspect the installation, and check bolt torques.

GENERAL INSTALLATION NOTES

- Installation shall be performed by qualified, experienced mechanics capable of performing this type of work. Northwoods recommends the work be performed in qualified ASE certified shops.
- Use only quality, certified tools and equipment appropriate for the job.
- Vehicle should only be supported by certified hoists, lifts, or jackstands of adequate capacity.
- Use only certified, dedicated spring compressors to compress and assemble springs. Northwoods recommends springs only be assemble and installed by qualified auto repair shops.
- Actual lift heights will vary by vehicle due to vehicle accessories, weights, loading, wear, and other factors.
- Upon completion of installation of springs or other suspensions and steering components, vehicles should be immediately aligned at a qualified shop.
- Modification to vehicle ride height requires re-alignment of headlights.
- Full inspection of all components installed should be checked after 300 miles of driving, including torque of all fasteners.
- Modified vehicles will handle and perform differently from stock vehicles, and the modified vehicle characteristics should be considered for driving safety. Modified vehicles may have affects to vehicle steering and response, and increased braking distances due to increased vehicle weight or larger tires.
- Modified vehicles may exhibit increased wear to suspension and other components, as well as an increase in vibration due to changes in component alignment and operating angles.